

REMARKS

Claims 22-25, 28, and 31-33 have been rejected under 35 U.S.C. 112, second paragraph. In accordance with suggestions made by the Examiner, Applicant has amended all of those claims to recite a fabric layer, so that such claim elements have a clear antecedent basis.

Claims 18-23 and 26-30 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Dierks et al. 3,944,698 in view of Cooper et al. 0019181. The Examiner has taken the position that it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the nonwoven fabric material of Cooper in the cementitious material of Dierks motivated with the expectation that the material composite would exhibit improved strength as noted in Dierks.

Applicant has amended claim 18 to recite that the wallboard is paperless, and that it comprises gypsum material, rather than cementitious material. Applicant respectfully submits that the Cooper reference specifically teaches away from the use of gypsum. In paragraph 0002, the Cooper reference defines “dry wall or gypsum board” as interchangeable terms, and then states that “bathrooms, basements and certain areas of residential and commercial kitchens may pose potential moisture problems for interior walls constructed from dry wall wallboard.” The solution to this problem, according to the Cooper reference, is to provide cementitious boards having a reinforcing fabric made from “E” glass fibers encapsulated by alkali and water resistant thermoplastic material. See paragraph 0016. According to the Cooper reference, cementitious material includes Portland cement concrete or other hydraulic cement. See paragraph 0028.

Further, the Examiner has not shown any teaching within the Dierks reference that provides an incentive or suggestion to combine the elements in the manner proposed. Combining reference teachings is improper unless the prior art contains some suggestion of the proposed combination:

“[T]he PTO erred in rejecting the claimed invention as an obvious combination of the teachings of two prior art references when the prior art provided no teaching, suggestion or incentive supporting the combination.” *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). “[A] challenger to the validity of a patent ‘cannot pick and choose among the individual elements of assorted prior art references to recreate the claimed invention;’ the challenger ‘has the burden to show some teaching or suggestion in the references to support their use in the particular claimed combination.’” *Smithkline Diagnostics, Inc. v. Helena Laboratories Corp.*, 859 F.2d 878, 887, 8 USPQ2d 1468, 1475 (Fed. Cir. 1988).

Applicant respectfully submits that the suggestion that the claimed invention is obvious in light of the above references is improper based on hindsight. Court decisions criticizing improper use of hindsight are legion:

“[D]ecomposing an invention into its constituent elements, finding each element in the prior art, and then claiming that it is easy to reassemble these elements into the invention, is a forbidden *ex post* analysis.” *In re Mahurkar Patent Litigation*, 831 F. Supp. 1354, 28 USPZ2d 1801 (N.D. Ill. 1993).

Claims 18-22 and 24-34 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Pilgrim 4,378,405 in view of Newman et al. 6,054,205. The Examiner has taken the position that it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the adhesive of Newman with the fabric layer of Pilgrim motivated with the expectation that the improved bonding of the fabric layer would result in improved dimensional stability of the material web as noted in Newman.

First, it is not at all clear that the addition of adhesive to the fabric layer of Pilgrim would, in fact, improve the dimensional stability of the material web. Applicant respectfully submits that there is no suggestion or motivation in either Pilgrim or Newman to support the combination suggested by the Examiner, particularly with such questionable motivation as that set forth by the Examiner in this case.

The motivation to modify the prior art must flow from some teaching in the art that suggests the desirability or incentive to make the modification needed to arrive at the claimed invention. See *In re Napier*, 55 F.3d 610, 613, 34 U.S.P.Q.2d 1782, 1784 (Fed. Cir. 1995) (“Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination.”); accord *In re Geiger*, 815 F.2d 686, 688, 2 U.S.P.Q.2d 1276, 1278 (Fed. Cir. 1987); *In re Laskowski*, 871 F.2d 115, 117, 10 U.S.P.Q.2d 1397, 1399 (Fed. Cir. 1989) (“[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification”) (quoting *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984)); *Sentex Systems, Inc. v. Elite Access Systems, Inc.*, 1999

U.S. App. LEXIS 3846 at *17 (“to invalidate claimed subject matter for obviousness, the combined teachings of the prior art references must suggest, expressly or by implication, the improvements embodied by the invention.”).

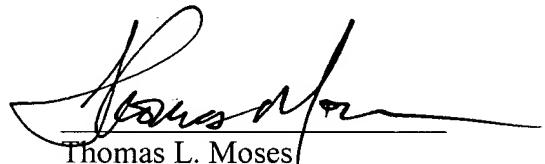
Secondly, Applicant respectfully submits that the Pilgrim reference does not recite a composite material including a nonwoven mat and a reinforcing fabric layer bonded together, as required by claim 18. The Pilgrim reference states that the fabric or web may be non-woven glass fibre tissues (col. 3, lines 29-30), either randomly distributed or orientated (col. 3, lines 42-43), and that “woven glass fabric or scrim can be employed, but is dearer and/or less effective than non-woven tissue” (col. 3, lines 67-68). Pilgrim makes no suggestion that the woven glass fabric or scrim may be combined with the nonwoven glass fiber tissues to form a composite, as required by Applicant’s claim 18. Thus, if one combined the adhesive of Newman with the fabric of Pilgrim in the combination suggested by the Examiner, the resulting combination would not fall within the scope of Applicant’s claims, because the suggested combination would lack the claimed element of the composite material.

Furthermore, Applicant has amended claim 18 to recite that the composite material is sufficiently open to allow the gypsum slurry to flow therethrough. The Newman reference, on the other hand, states “the melt blown polymer web prevents the cementitious slurry from sinking into the large mesh openings of the glass fiber facing sheet.” (see column 9, lines 49-51). Further, the Newman reference states “Instead, the melt blown polymer web maintains a portion of the cementitious slurry on the surface of the glass fiber facing sheet and causes the slurry to window pane the mesh openings of

the glass scrim thereby forming a substantially planar bridge surface between the transverse and longitudinal yarns." (see column 9, lines 52-58). Thus, the Newman reference teaches away from providing a composite material that is open enough to allow gypsum slurry to flow therethrough.

Accordingly, Applicant respectfully submits that the application is now in condition for allowance, and such action is respectfully requested.

Respectfully submitted,



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